amount, at a frequency, and for a duration effective to reduce or eliminate said asthma and said non-invasive fungus-induced rhinosinusitis, said formulation comprising an antifungal agent.

2 1
71. The method of claim 70, wherein said mammal is a human.

3 1
72. The method of claim 70, wherein said mammal is nonatopic.

4 1
73. The method of claim 70, wherein said mammal is immunocompetent.

5 1
74. The method of claim 70, wherein said asthma is chronic.

6 1
75. The method of claim 70, wherein said non-invasive fungus-induced rhinosinusitis is chronic.

7 1
76. The method of claim 70, wherein said non-invasive fungus-induced rhinosinusitis is characterized by polyp formation or polypoid change.

8 1
77. The method of claim 70, wherein said mucoadministration comprises direct mucoadministration.

9 1
78. The method of claim 70, wherein said method comprises mucoadministering said formulation to at least a portion of the nasal-paranasal anatomy of said mammal.

10 1
79. The method of claim 70, wherein said method comprises mucoadministering said formulation to at least a portion of the airways of said mammal.

11 1
80. The method of claim 70, wherein said method comprises mucoadministering said formulation to at least a portion of the lung airways of said mammal.

12 81. The method of claim 1, wherein said formulation is in a solid form.

13 82. The method of claim 1, wherein said formulation is in a liquid form.

14 83. The method of claim 1, wherein said formulation is in an aerosol form.

15 84. The method of claim 1, wherein said formulation is in a form selected from the group consisting of a powder, crystalline substance, gel, paste, ointment, salve, cream, solution, suspension, partial liquid, spray, nebulae, mist, atomized vapor, aerosol, and tincture.

16 85. The method of claim 1, wherein said mucoadministration comprises irrigating at least a portion of the nasal-paranasal anatomy of said mammal with a liquid form of said formulation.

17 86. The method of claim 1, wherein said mucoadministration comprises applying an aerosol form of said formulation to at least a portion of the nasal-paranasal anatomy of said mammal.

18 87. The method of claim 1, wherein said mucoadministration comprises applying a powder form of said formulation to at least a portion of the nasal-paranasal anatomy of said mammal.

19 88. The method of claim 1, wherein said antifungal agent comprises a macrolide.

20 89. The method of claim 1, wherein said antifungal agent comprises an azole.

21 90. The method of claim 1, wherein said antifungal agent interpolates fungal cell wall components.

22 91. The method of claim 1, wherein said antifungal agent comprises a sterol inhibitor.

23 92. The method of claim 1, wherein said antifungal agent comprises an antifungal agent selected from the group consisting of amphotericin B, ketoconazole, itraconazole, saperconazole, voriconazole, flucytosine, miconazole, fluconazole, griseofulvin, clotrimazole, econazole, terconazole, butoconazole, oxiconazole, sulconazole, ciclopirox olamine, haloprogin, tolnaftate, naftifine, terbinafine hydrochloride, morpholines, nystatin, natamycin, butenafine, undecylenic acid, Whitefield's ointment, propionic acid, and caprylic acid.

24 93. The method of claim 1, wherein said antifungal agent comprises an antifungal agent selected from the group consisting of amphotericin B, ketoconazole, itraconazole, saperconazole, and voriconazole.

25 94. The method of claim 1, wherein said antifungal agent comprises amphotericin B.

26 95. The method of claim 1, wherein said antifungal agent comprises itraconazole.

27 96. The method of claim 1, wherein said formulation comprises a pharmaceutically acceptable aqueous vehicle.

28 97. The method of claim 27, wherein said formulation comprises about 0.01 ng to about 1000 mg of said antifungal agent per liter.

29 98. The method of claim 27, wherein said effective amount comprises about 0.01 mL to about 1 L of said formulation per nostril of said mammal.

30 99. The method of claim 27, wherein said effective amount comprises about 5 mL to about 100 mL of said formulation per nostril of said mammal.

31 27
100. The method of claim 96, wherein said effective amount comprises about 20 mL of said formulation per nostril of said mammal.

32 27
101. The method of claim 96, wherein said formulation comprises about 1 ng to about 500 mg of said antifungal agent per liter.

33 27
102. The method of claim 96, wherein said formulation comprises about 100 mg of said antifungal agent per liter.

34 1
103. The method of claim 70, wherein said formulation comprises a plurality of antifungal agents.

35 1
104. The method of claim 70, wherein said effective amount of said formulation comprises about 0.01 ng to about 1000 mg of said antifungal agent per kg of body weight of said mammal.

36 1
105. The method of claim 70, wherein said effective amount of said formulation comprises about 1 ng to about 500 mg of said antifungal agent per kg of body weight of said mammal.

37 1
106. The method of claim 70, wherein said effective amount of said formulation remains constant during said effective duration.

38 1
107. The method of claim 70, wherein said effective frequency of said mucoadministration is from about four times a day to about once every other week.

39 1
108. The method of claim 70, wherein said effective frequency of said mucoadministration is from about twice a day to about once a week.

40 109. The method of claim 70, wherein said effective frequency of said mucoadministration is more frequent than once a day.

41 110. The method of claim 70, wherein said effective frequency of said mucoadministration is more frequent than once a week.

42 111. The method of claim 70, wherein said effective duration is greater than about 7 days.

43 112. The method of claim 70, wherein said effective duration is greater than about 14 days.

44 113. The method of claim 70, wherein said effective duration is greater than about 30 days.

45 114. The method of claim 70, wherein said effective duration is greater than about 60 days.

46 115. The method of claim 70, wherein said effective duration is greater than about 90 days.

47 116. The method of claim 70, wherein said formulation comprises a compound selected from the group consisting of pharmaceutically acceptable aqueous vehicles, pharmaceutically acceptable solid vehicles, mucolytic agents, antibacterial agents, anti-inflammatory agents, immunosuppressants, dilators, vaso-constrictors, steroids, and therapeutic compounds.

48 117. The method of claim 70, wherein said method comprises administering to said mammal a second formulation.

49 118. The method of claim 48 117, wherein said second formulation comprises a compound selected from the group consisting of antifungal agents, pharmaceutically acceptable aqueous vehicles, pharmaceutically acceptable solid vehicles, mucolytic agents, antibacterial agents, anti-

inflammatory agents, immunosuppressants, dilators, vaso-constrictors, steroids, and therapeutic compounds.

119. The method of claim 70, said method comprising, after said mucoadministration, prophylactically mucoadministering to said mammal a prophylactic formulation in an amount, at a frequency, and for a duration effective to prevent said asthma or said non-invasive fungus-induced rhinosinusitis, said prophylactic formulation comprising an antifungal agent.

120. The method of claim 119, wherein said prophylactic mucoadministration comprises direct mucoadministration.

121. A method for prophylactically treating a mammal at risk for developing asthma and non-invasive fungus-induced rhinosinusitis, said method comprising mucoadministering to said mammal a formulation in an amount, at a frequency, and for a duration effective to prevent said asthma and non-invasive fungus-induced rhinosinusitis, said formulation comprising an antifungal agent.

122. A method for treating a mammal having asthma and non-invasive fungus-induced rhinosinusitis, said method comprising the steps of:

a) identifying said mammal, and

b) mucoadministering a formulation in an amount, at a frequency, and for a duration effective to reduce or eliminate said asthma and said non-invasive fungus-induced rhinosinusitis, said formulation comprising an antifungal agent.

123. The method of claim 122, wherein said identifying comprises diagnosing.

124. A method for prophylactically treating a mammal at risk for developing asthma and non-invasive fungus-induced rhinosinusitis, said method comprising the steps of:

a) identifying said mammal, and

b) mucoadministering a formulation in an amount, at a frequency, and for a duration effective to prevent said asthma and said non-invasive fungus-induced rhinosinusitis, said formulation comprising an antifungal agent.

125. An article of manufacture, comprising packaging material and a formulation contained within said packaging material, wherein said formulation comprises an antifungal agent and wherein said packaging material comprises a label or package insert indicating that said formulation can be mucoadministered to a mammal having asthma and non-invasive fungus-induced rhinosinusitis in an amount, at a frequency, and for a duration effective to reduce or eliminate said asthma and said non-invasive fungus-induced rhinosinusitis.

126. An article of manufacture, comprising packaging material and a formulation contained within said packaging material, wherein said formulation comprises an antifungal agent and wherein said packaging material comprises a label or package insert indicating that said formulation can be mucoadministered to a mammal at risk for developing asthma and non-invasive fungus-induced rhinosinusitis in an amount, at a frequency, and for a duration effective to prevent said asthma and said non-invasive fungus-induced rhinosinusitis.--

REMARKS

Applicant submits that claim 1-69 have been canceled without prejudice and claims 70-126 have been added herein. Thus, claims 70-126 are pending. The specification as filed provides support for these claims. In particular, Example 5 starting on page 66 and extending to page 67 indicates that patients having both asthma and non-invasive fungus-induced rhinosinusitis were successfully treated. No new matter is added by these amendments.

Applicant also submits that claims 70-126 are now in condition for examination, which action is respectfully requested. Filed herewith is a check in payment of the excess claims fees